OZ Systems' Response
To The Iowa Department of Public Health
Request For Proposal
No. BD80400S280
For A
Web-Based Data Collection System For
Early Hearing
Detection & Intervention (EHDI)

Technical Proposal

PUBLIC COPY

B. LETTER OF TRANSMITTAL

October 30, 2003

Ms. Ashley Super
Purchasing Agent III
Iowa Department of General Services
Purchasing Division
Hoover State Office Building – Level A
Des Moines, Iowa 50319-0105

Dear Ms. Super:

Optimization Zorn Corporation (DBA OZ Systems) is pleased to submit the following response to Request For Proposals (RFP) No. BD80400S280, for a Web-Based Data Collection System for Early Hearing Detection & Intervention (EHDI).

Contained herein is OZ Systems' <u>Technical Proposal</u> to the RFP. In accordance with the instructions of the state, OZ Systems' <u>Cost Proposal</u> for this RFP is contained in a separately sealed cover.

Please do not hesitate to contact me if you have any questions or if there are any items in this proposal that need clarification.

Sincerely,

Terese Finitzo Vice President OZ Systems

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D. EXECUTIVE SUMMARY

OZ Systems is the premier provider of Early Hearing Detection and Intervention (EHDI) information management systems in the world. Our focus is on the delivery of tools for use by hospitals, care providers, and public health agencies to capture, organize and manage accurate information to serve successful tracking and follow-up activities in a cost effective and timely manner.

Founded in 1996, OZ Systems is based in Dallas, Texas. The OZ Systems staff is among the most experienced and knowledgeable in the nation when dealing with all aspects of an EHDI program, and specifically with information management. The experience of our dedicated team in implementing numerous state-level EHDI programs allows us to avoid most pitfalls, anticipate problems proactively, and promptly provide solutions.

OZ Systems is fully prepared to comply with the requirements identified in the RFP to ensure the successful deployment of the system in the State of Iowa. We are a proven and reliable partner with the State of Iowa that has used OZ Systems' earlier, PC-based data management (SIMS©) for its newborn hearing screening program.

The information management solution proposed is eSP (eScreener PlusSM), which immediately meets or exceeds all the functional requirements as stated in the RFP. eSP is an innovative, web-based application that incorporates the best business practices of EHDI programs. It is designed to ensure the efficient and effective implementation of a data management, tracking, and surveillance system for the Department of Public Health and for facilities and providers throughout the state.

As a web-based solution, eSP is accessible to all authenticated users with a computer and access to the Internet. Its intuitive design makes it easy to learn and easy to use. eSP is a proven platform and is in use or being implemented in a number of settings, including large and small statewide programs (Texas, North Dakota) as well as nationally by the National Health Service in England.

E. ADMINISTRATIVE, CONTRACTUAL, SERVICE REQUIREMENTS AND CONTRACTOR INFORMATION

OZ Systems has read, understands, and will comply with the terms of the RFP as stated in *Chapter 1 –Administrative Issues* and *Chapter 2 – Contractual Terms and Conditions*. OZ Systems' staff developed this proposal solely in-house. OZ Systems certifies that no relationship exists or will exist during the contract period between OZ Systems and the State of Iowa that interferes or will interfere with fair competition or present a conflict of interest.

OZ Systems affirms that the proposed information management solution, eSP, complies with mandatory system and business requirements found in *Chapter 3 –Scope of Work and Mandatory Requirements* of the RFP. We detail and describe compliance for each section of this Chapter in the pages that follow. While the system proposed is not available on CD-ROM, screen shots similar to those required in the RFP are provided. We are prepared to demonstrate the system's acceptable operability prior to purchase. Further, OZ Systems affirms its commitment to comply with the mandatory vendor and training requirements found in *Chapter 3 –Scope of Work and Mandatory Requirements*.

3.1 MANDATORY REQUIREMENTS

OZ Systems understands the challenges, barriers, and problems associated with implementing, enhancing and sustaining an effective tracking and surveillance system for a state Early Hearing Detection and Intervention Program. Our knowledge is based on lessons learned in ten years of practical program experience at a national, state and hospital level rather than on hypothetical "what ifs". The SIMS© system currently used by some states and hospitals has permitted partial success in achieving components of the Center for Disease Control's Goals 1a through 1g in Chapter 3 of the lowa RFP. Indeed, it is the SIMS© data system's tools that allowed OZ Systems to reevaluate and design a new type of system to assure quality improvement and achieve the CDC national goals related specifically to tracking and intervention. It is this web-based eSP system that we propose for the State of lowa.

A. <u>SYSTEM REQUIREMENTS</u>

1. System must be web-based and available from any computer that is connected to the Internet

The OZ Systems eSP application proposed in this response meets this system requirement. eSP is 100% web-based. Due to its web-based design, it has very low local system requirements with only Internet access

and a current web-browser (either Internet Explorer or Netscape) needed to access and use the system. No additional software installation on local machines is required.

2. System must operate efficiently with all levels/types of Internet connections

The OZ Systems eSP application proposed in this response meets this system requirement. The system operates with DSL or a T-1 connection as well as by phone modem. It is designed to be viewable with a screen resolution/display of 800 x 600 or higher.

3. System must ensure a secure electronic exchange of information between all hearing screening providers and the IDPH

The OZ Systems eSP application proposed in this response meets this system requirement. The system offers information capture, organization, management, and analysis capabilities and allows infants to be tracked throughout the screening, follow-up, referral, diagnosis and intervention process. It is HIPAA (Health Insurance Privacy and Accountability Act) and FERPA (Family Educational Rights and Privacy Act) compliant and meets or exceeds federal privacy and security requirements regarding electronic patient information management, while allowing secure access by all hearing health providers from screeners and managers in the hospital to audiologists and area education agencies, otolaryngologists, and others critical to the care process for a child with a suspected hearing loss. The data is protected from the servers to the end user through Secure Sockets Layer (SSL-128 bit) encrypted data streams as well as Cisco firewall protection at the front-end and back-end database servers.

4. System must require a unique login and password for each user

The OZ Systems eSP application proposed in this response meets this system requirement. eSP authenticates user access at the database level. Access is granted by the use of login identifiers and passwords. A user will not gain access to the system without entering credentials that match usernames and passwords that exist in the database. The password acceptability can be configured for predetermined password expirations and strong passwords. Strong passwords are between six and sixteen characters, with a mix of upper and lowercase characters, numbers, and symbols.

5. System must be configurable to allow specified entities access to limited parts of the system

The OZ Systems eSP application proposed in this response meets this system requirement. The system has separate access levels defined: Screener, Program Manager, and State User. Each access level has clearly defined permissions or access rights that will either grant or deny access to specific areas of the application. By defining these access levels in the program logic, it is possible to limit or extend functionality to users or entities belonging to a specific group.

Individual access rights to functionality and data can be established and modified by an authorized security administrator. The robust security and confidentiality features in eSP allow authorized users to have access to "their" patients' records and only their patients' records where permission has been authorized.

The system further supports the ability to designate tasks and roles in a domain specific manner; therefore the rights of a user may differ by the operational context of a user. For example, a specific user may have different rights while working on behalf of hospital A than while working on behalf of hospital B.

System must be built on Microsoft technologies; specifically utilize SQL Server 2000 and operate using a Microsoft Windows 2000 (or above) server operating system

The OZ Systems eSP application proposed in this response meets this system requirement. eSP is an ASP/ASP.NET application with supporting Visual Basic and C# components. eSP is built on the latest Microsoft™ technologies; the system is 100% web based and utilizes ASP (active server pages), served by IIS 5.0 (Microsoft Internet Information Services) accessing a Microsoft SQL Server 2000 Enterprise database.

Included in this submission are two hardware specifications (Recommended and Minimum). The state may elect either of these hardware configurations depending on Iowa's specific security and confidentiality needs.

Recommended Hardware Requirements

The recommended (Diagram A.) implementation requires dual front-end web servers running IIS (Internet Information Server) version 5 and SSL (Secure Sockets Layer) encryption on Windows 2000 Advanced Server. These servers are load-balanced (Active/Active) to improve performance

and provide redundancy. If one of these servers fails the other takes the full workload until the downed server can be repaired.

At the backend, two SQL 2000 servers maintain copies of the eSP database. One server is the primary database server handling all requests from the front-end web servers. The second server maintains a duplicate eSP database using SQL server pull replication and can immediately become the primary backend server in the event of failure.

A perimeter Pix 506 firewall only allows the web traffic from eSP users to the front end. A second firewall is added to only allow SQL server request traffic from the front-end web servers to the backend database servers, further protecting patient data.

Diagram A eSP Network Infrastructure Technical Specification October 2003 Public Internet Customer network Cisco Pix 506e (Cold Spare) 000 Minimum/8 Port Switch FRONT END SPECIFICATION Dual 2.4GHZ Processor 1GB 266MHZ Memory Raid 5 Container 3 36GB 10K RPM SCSI Drives Windows 2000 Advanced Server IIS 5.0 With SSL Crystal Reports 9.5 - Load Balanced -Cisco Pix 506e (Cold Spare) Backup System not diagramed. A backup systems must be in Dual Xeon 2.4 GHZ Proces 2GB 266MHZ Memory Raid 10 Container 4 73GB 15K RPM SCSI Drives Vindows 2000 Advanced Serve place, such as DLT tape Backup System. OZ Systems can assist with locating a SQL Server 2000 backup system if one does not already exist on customer site.

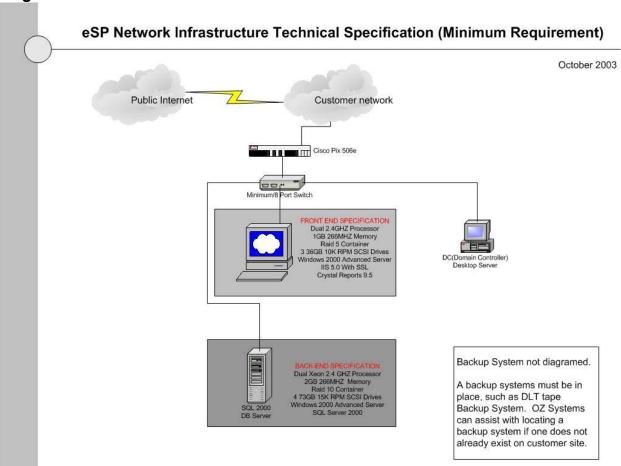
Minimum Hardware Requirements

The minimum hardware requirement to run eSP (Diagram B) consists of a front-end web server running IIS with SSL (Secure Sockets Layer) encryption on Windows 2000 Server operating System. The single

backend server stores the eSP data and fulfils the requests passed by the front-end web server.

At a minimum the eSP implementation must be protected with a Cisco Pix 506 firewall. The Pix provides the state full inspection firewall protection and intrusion detection.

Diagram B.



Either configuration is acceptable to OZ Systems. The state may make its decision based on state rules for security and confidentiality.

7. System must function on a TCP/IP network

The OZ Systems eSP application proposed in this response meets this system requirement. The application is available via the Internet and protected through SSL (Secure Sockets Layer). The SSL security protocol

provides data encryption, server authentication, message integrity, and client authentication for a TCP/IP connection.

8. System must be compatible with the following types of screening equipment currently in use: Bio-logic AuDX, Bio-Logic ABaer, Otodynamics EZScreen, Madsen Echocheck, and Natus Algo for the electronic transfer of data

The OZ Systems eSP application proposed in this response meets this system requirement. The eSP application can import data from the technologies listed above. The eSP application can import data from thirteen manufacturers, some of which might be used by lowa hospitals in the coming years. As we are not in competition with hearing screening device manufacturers, OZ Systems works continuously with the major equipment manufacturers to ensure screening results are received into eSP via direct file import from screening technologies. Screening equipment manufacturers use a file format entitled OZ-7, which is used to import data into eSP. For importing screening results, OZ-7 is superior to the more common ASCII import. Since the OZ-7 is encrypted, the user cannot alter screening results without the system recognizing such modification. Thus data integrity is assured. The system also uses unique identifiers to link records and track each child. Manual data entry is available as an alternative to electronic entry should the state permit it.

Additional information on specific versions of equipment can be stored. Reports of results by technology (i.e., AABR, TOAE, DPOAE) as well as by specific manufacturers (Natus ALGO versus Bio-Logic ABAER) are available. Such control of data facilitates troubleshooting equipment problems by hospitals. The state has the data to identify potential technology errors in screening results.

B. <u>BUSINESS REQUIREMENTS</u>

The IDPH has identified the following business requirements:

- 1. System must support the seven national EHDI program goals developed by CDC, as follows:
 - a) All newborns will be screened for hearing loss before 1 month of age, preferably before hospital discharge.
 - b) All infants who screen positive will have a diagnostic audiologic evaluation before 3 months of age.

- c) All infants identified with a hearing loss will begin receiving appropriate early intervention services before 6 months of age.
- d) All infants and children with late onset, progressive, or acquired hearing loss will be identified at the earliest possible time.
- e) All infants with hearing loss will have a medical home.
- f) Every state will have a complete EHDI Tracking and Surveillance System that will minimize loss to follow-up.
- g) Every state will have a comprehensive system that monitors and evaluates the progress towards the EHDI Goals and Objectives.

The OZ Systems eSP application proposed in this response supports each of these business requirements. We further discuss and describe how eSP meets these requirements in the screen capture illustrations from the eSP application, which follow.

2. System must be able to easily handle 300 initial users, with expected continual growth

The OZ Systems eSP application proposed in this response supports this business requirement. The system provides the ability to add many additional users and is designed to grow as the state's needs grow. The system is currently in use in a setting with much higher user requirements.

3. System must be user-friendly and intuitive; non-technical nursing and other health care professionals must be able to use the majority of functionality within the system

The OZ Systems eSP application proposed in this response supports this business requirement. The eSP system is easy to learn and easy to use. Its intuitive graphical user interface permits easy system navigation and is based on several years experience in actual, real world operation of newborn hearing screening programs. We have built a system that is suitable for those staff that are computer literate and those that are just beginning to use computer-based record keeping.

- 4. System must collect/store the following information, all of which could be required:
 - a) Unique record ID (expected to be generated by the system)
 - b) Medical record number

- c) Birth Certificate Identifier
- d) Name
- e) Date of birth
- f) Gender
- g) Name of screening facility
- h) Gestational age
- i) Name of Attending physician/primary care physician
- j) Nursery status (NICU, well-baby, etc.)
- k) Infant's location/status (inpatient, outpatient, transferred in, transferred out, demise, etc.)
- I) Parental demographic information (mother and father's name, address, county of residence, phone number, foster parent, etc.)
- m) Risk factors as indicated by the Joint Commission on Infant Hearing (JCIH) 2000 position statement
- n) Number of times each ear was tested
- o) Name of screener
- p) Time and date of screening
- q) Right ear/Left ear results broken down by type of test (OAE, ABR, Behavioral, etc.)

The OZ Systems eSP application proposed in this response supports each of these business requirements. In the following six screens, designated **Figures 1 though 6**, we show how current eSP functionality meets the above lowa requirements a through q. The screens have been captured either from the eSP application in use in England or the application in use in Texas, currently at a state administrative level. The reader is reminded that data displayed are not real patient records.

Figure 1 shows the unique system identifier required in (a) and shown in place of the name. Note the capacity of the system to further keep patient records confidential in the subsequent fields. Selecting "view" brings up the data on the "confidential" baby but it does not contain system notes, which might be used to identify the infant, nor does it contain parent contact information for the same reason. Thus, a confidential record meets HIPAA and FERPA.

Required data items **b**, **c**, **d**, **e**, **f**, **g**, **h**, **j**, **k**, **l**, and **m** are shown in the **Figure 2** "Baby Details"/Demographics screen shot from eSP. In the state application from which this screen has been captured, the state requested a field labeled Medicaid No. This is data item c, which can be changed to Birth Certificate Identifier for Iowa. Such label changes are routinely requested and made.

Note in the section labeled "**Primary Contact Details**", that data from additional family-related contacts can be stored.

Note item I, shown in the section labeled "Patient Professional Contacts", allows the state to keep track of the PCP/Medical Home provider as stipulated by the IDPH business requirements.

Data item I is further described in **Figure 3**. Note data from additional family-related contacts can be stored.

Data items **n**, **o**, **p** and **q** are shown in **Figure 4**. Note that, as requested the state can track the number of times each ear (**n**) was tested (two on **Birth Screen**, two as **Outpatient Follow-up** screens). The name of the screener (**o**), **Cantu**, **Maria** is shown along with the date and time of the screen (**p**) and the exam type (**q**).

An individual birth screen exam is shown in **Figure 5**, providing additional data on test location, service provider, technique and technology. It is possible for the hospital to include the name of the technology, for example ILO 92, instead of "Generic OZ 7". Even an equipment number for tracking performance can be maintained in large facilities with multiple pieces of screening equipment.

Figure 6 shows the JCIH 2000 risk factors highlighted in yellow. If additional risk factors are needed, the local facility can enter them. For the implementation shown here, these are core, local, and national risk factors that may be tracked.

Infants with risk factors present can be placed in a surveillance category and appointments set to assure the earliest identification of infants and children with late onset, progressive, or acquired hearing loss, as stipulated by the IDPH Business Requirements.

5. System must provide authorized individuals the ability to add new users, edit existing users and inactivate users.

The OZ Systems eSP application proposed in this response supports this business requirement as shown in **Figures 7 and 8**. Individual access rights to functionality and data can be established, modified, and removed by an authorized security administrator using the administrative tools on the menu bar on the left of the screen in **Figure 7**. From this screen, the administrator can edit, delete or add a screener, as highlighted in the center section entitled "Managing Screeners".

In **Figure 8**, the administrator can edit the access of a specific user, in this case, Maria Cantu (highlighted at the top of the screen) who is acting on behalf of St. Mary Hospital. The administrator can assign rights for each user and permit some users to grant those permissions to other users.

 System must allow users to make changes to demographic information and clearly display the most recent entry, while keeping a history of changes. Examples of demographic information are infant's name, address, and phone number.

eSP supports this business requirement. The application allows direct entry and updating of patient information. Data entered at the point of care are made available to "authenticated" users, or those explicitly granted permission to use the system. These data are immediately viewable by the state. System audit notes of changes made to demographic data are automatically recorded and viewable, permitting IDPH to see what changes have been made, when they are made and by whom. In **Figure 9**, the "user" making changes is the system administrator. If the user were "Cantu, Maria," that name would be displayed. Note that eSP keeps track of an address change, a telephone change for a contact and a first name change with a date and time stamp.

7. System must have the ability to merge patients' records if duplicate entries are detected. This option should allow the user to see the contents of the two records to be merged and select which contents will be carried into the merged record.

The OZ Systems eSP application proposed in this response supports this business requirement. Each record in the database is assigned a unique global identifier, which was shown in Figure 1. A facility-specific medical record number also validates each record entered into the database. The system prevents creation of a record, for which there is an existing medical record number. Where duplicate record information is entered due to incomplete or mistyped names or medical record numbers, the system offers merge capabilities.

The merge function in **Figure 10** taken from the system in use in England, allows the user to merge two records into one master record so duplicate record entries can be corrected. The merge function examines records on each user-entered field such as date of birth, medical record number and name. Where discrepancies exist between the two records, the user is informed as such and selects which entry should be retained.

8. System must have the ability to generate and print a variety of statistical reports. At a minimum, required reports include: number of admissions, number tested, number missed, number referred for left and/or right ear, number of bilateral passes. Data to be included, at a minimum, should be infant name, date of birth, address, parent's name and physician's name

The OZ Systems eSP application proposed in this response supports this business requirement. The system allows the user to generate standardized and ad hoc reports based on Crystal Reports. Statistical analyses are available to measure performance on multiple levels (i.e. hospital, health district, statewide).

In addition, the system allows the independent specification of the population to use and the analysis to perform. This design results in the ability to perform the same report at virtually any level of detail or aggregation. It also results in the ability to perform different reports on the same subset of patients.

The eSP system permits the user to configure preferred reports allowing accurate and efficient use of complex reports and analyses. The screen captured in **Figure 11** is a sample Birth Screening report, with information on the total births, number of infants who need screening (minus refused, deceased, etc.), the number screened (done), the number who pass both (Clear response is England terminology), the number who do not pass, the number missed and the number needing follow-up. The data are also displayed graphically at the top of the page.

Reports such as this assist the IDPH in meeting their Business Requirement to have a comprehensive system that monitors and evaluates the progress towards the EHDI goals and objectives.

Figure 11

 System must allow users the ability to filter reports based on any one of the following criteria: patient name, birth facility, date of birth, medical record number, county of residence, date of screening or test result disaggregated by race and ethnicity

The OZ Systems eSP application proposed in this response supports this business requirement. The system provides extensive search capabilities through the use of multi-layered, user defined filtering. eSP provides a simplified search mechanism with a graphical user interface for the specification of search criteria thus eliminating the need for a user to learn a query language.

The broad categories of parameters include demographic features of the patient and/or parent, screening results, screening and diagnostic outcomes, and risk factors. Specifically, each of the filter criteria listed in this requirement can be used to search for patients, lists of patients, and /or generate reports.

The following screen, **Figure 12**, shows a filter/search page. Note the multiple methods available to a user to search including name (note multiple ways to search for name), Medical Record Number, Date of Birth, Location and Protocol. The user can further define a search by selecting any of the additional search criteria. This selection takes a user to a second page of filters. Searches can be customized and saved to facilitate repeat use, as shown in the bottom box entitled "Saved Custom Searches".

Figure 12

Such extensive filtering will facilitate identifying which newborns were or were not screened before one month of age, preferably before hospital discharge.

Such extensive filtering will facilitate identifying which infants who screened positive have or have not had a diagnostic audiologic evaluation before 3 months of age.

Such extensive filtering will facilitate identifying which infants with hearing loss begin receiving early intervention services before 6 months of age.

A second approach to meeting the IDPH Business Requirements and minimizing loss to follow-up is shown in **Figure 13**, the "Patient Journey"/Protocol page. From this single page, without the need for extensive filtering, the hospital users and lowa Area Education Agency staff can add or edit patients, screen patients by protocol, find infants in Surveillance (DPI: The presence of a risk factor for a Delayed Progressive or Incident based hearing loss) and distinguish them from infants needing simple follow-up. From this page the user can import screening results, set appointments for out-patient rescreening, DPI or audiologic assessment and send letters where needed. Infants' names appear on this list only if they meet the criteria (for example "needing an appointment," or a letter).

Figure 13

It is important to note that the security / confidentiality configurations in eSP permit a screener or program manager at "St. Mary Hospital," to only view patients from that hospital. The AEA staff only sees patient records to which his or her AEA has been given access. Theoretically, state administrative staff can view all patients from all hospitals and identify which infants have not yet received care and thus remain on this list. (This is not true in all states and depends on state law or rules).

10. System must provide the ability to generate and print a report that includes: infant's name, gender, date of birth, medical record number, and screening results for each ear

The OZ Systems eSP application proposed in this response supports this business requirement.

Figure 14 shows a letter for an infant with a "pass" result. Note all the information requested by the IDPH is available.

11. System must provide the ability to generate and print a department specific waiver form

The OZ Systems eSP application proposed in this response supports this business requirement. Using Microsoft Word, the system can be configured to accommodate the storage and printing of any number of department-specific forms. **Figure 15** shows a "waiver form," that can be statewide or local.

12. System must aid users in communicating screening results to physicians, families and other interested parties either by printed letter or printed report

The OZ Systems eSP application proposed in this response supports this business requirement. The system supports the ability to generate letters automatically using pre-defined templates for test results, conditions and follow-up status for communication to physicians, audiologists and families, thus minimizing "lost to follow-up" as identified in the IDPH Business Requirements. The documents generated can be accessed as Microsoft Word documents. The individual documents may be retrieved for viewing or reprinting at any time, thus maintaining an audit trail for this correspondence.

The system provides extensive parental and provider notification functions through the generation of communications that can be sent using mail merge technology. Message content is saved in the system for audit purposes as needed. Communications, such as letters, may be designated as enterprise-wide (statewide) or used in selected sites. Letters Assignment is shown as a screen in **Figure 16**. Contact titles are label change requests by the state.

13. System must provide users the ability to import or export the following data: infant's name, gender, date of birth, address, parent's name and screening results for each ear for potential use with other applications

The OZ Systems eSP application proposed in this response supports this business requirement. The system supports the use of Web Services (using XML and SOAP) capable of receiving XML messages and the importation of data from files in XML format. Data can also be shared using EDI (Electronic Data Interchange) electronic documents. All external communications are mediated under 128-bit SSL.

Figure 17 is a screen of an export list set-up with IDPH's requested items. Data in this figure are being exported as XML. Parent name is not shown here as only seven items are visible in the "fields to include" box.

14. System must have the capacity to be customized to collect additional information if needed

The OZ Systems eSP application proposed in this response supports this business requirement. The platform upon which the system is built was designed specifically to adapt to the evolving needs of the public health entity. It is designed to accept the addition of multiple "arena of care" modules to serve an ever-expanding array of public health information management demands. The system's modular capability allows additional functions to be added, modified, or removed as needed. The base eSP Security platform remains the same across applications.

In addition, should the state request customization, OZ Systems approaches system customization via an internationally recognized and utilized methodology called Dynamic Systems Development Methodology (DSDM). DSDM is a flexible yet controlled process, which combines the most effective use of knowledge, tools and techniques to achieve information technology project success on time and on budget. The DSDM approach can be undertaken, if requested, on either the EHDI module or on any of the other arenas of care. It is a proven solution that OZ Systems has used to implement other projects with success.

15. System implementation will <u>NOT</u> include conversion and/or migration of existing data

OZ Systems possesses the capability to provide services for the conversion of existing data collected by sites currently using the OZ Systems' SIMS© application into the new eSP system.

C. <u>VENDOR REQUIREMENTS</u>

1. REFERENCES

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2. Vendor must include a comprehensive implementation plan, schedule and work breakdown for full implementation by January 1, 2004 within their proposal

Based on the state's responses to questions submitted by vendors (Amendment Two) relating to the awarding of the contract by late November and implementation of the system by January 1, 2004, we are proposing an implementation plan beginning December 1, 2003 with the three initial perinatal sites "going live" by January 1. This implementation schedule begins within two days of contract signing if the award date is delayed beyond November 30.

Please see **Attachment A** for a project plan narrative.

While OZ Systems anticipates full compliance with the implementation plan as it is proposed, it must be noted that, within the allotted timeframe, the plan is ambitious and highly dependent upon access and prompt responses from IDPH staff. In addition, significant work will need to be accomplished during the December holiday period which will pose additional challenges to both OZ Systems and IDPH personnel to complete the necessary workload according to plan. Based on OZ Systems' experience, the only significant risk we see that could adversely affect the successful implementation of this project is the ambitious timeline to "go live".

Table 1 describes OZ Systems' experience with programs of various scales in terms of annual births and number of facilities, as requested in Section 2 of the IDPH RFP.

Table 1 Prior Program Experience - Scale

Program	Annual Births	Facilities
England (SIMS Pilot to eSP)	600,000	221
Texas (SIMS to eSP)	326,000	201
NEW IOWA	37,000	109
lowa (SIMS)	37,000	52
Delaware (SIMS)	10,000	6
North Dakota (SIMS to eSP)	8000	22

Table 2 describes the breadth of services OZ Systems' provides to various programs.

Table 2 Prior Program Experience – Services

Services	England	Texas	NEW IOWA	lowa (SIMS)	North Dakota	Delaware
Implementation	Х	Х	Х	Х		
Training	Х	Х	Х	Х	Х	Х
Support	X	Х	X	X	X	X
Managed	X (second	X				
Services	tier)					
Certification		X				
Data		Х				
Management						

3. Vendor must have a staff person available to participate on an implementation team at the IDPH; submitted proposal must include limitations regarding participation and qualifications of individual to be allocated

Maria Cantu, Director, Support Services, a senior member of OZ Systems' Support and Development staff will be assigned to the IDPH Project with backup provided by Brenee Hill, MS. The state of lowa has worked with Ms. Cantu for several years. Since her work with lowa, she has been responsible for training in England (train the trainer) and second tier support to the English support team. Thus, she meets lowa's requirement for a highly skilled and qualified partner. Ms. Hill is an audiologist with extensive newborn hearing screening experience, including support of other state and national projects. She is responsible for troubleshooting and assisting the Texas state team transition to eSP.

Following initial set-up, training and first site implementation, and for the first 6 months, monthly conference calls between IDPH staff and Maria Cantu (and/ or Brenee Hill) will be conducted to review progress, examine performance and identify potential problem areas. These may include retraining, communication protocols, hospital performance, facility implementation or other administrative quality assurance issues.

As requested, Ms. Cantu or Ms. Hill can be available for additional onsite participation on an implementation team at IDPH.

Please see Attachment B for Maria Cantu's and Brenee Hill's vitae.

3. Vendor must work as a partner with the IDPH, assisting with the installation and integration of all software into the existing IT environment; submitted proposal must include all implementation services and costs associated

OZ Systems has a strong track record of partnering with public entities on multiple levels in various capacities to ensure project success. We are eager to prove our capabilities in this area to the IDPH by assisting in the installation and integration of the eSP system into the state's existing environment. Our technical staff will be available to the state to assure that lowa IT can install the system and configure to function effectively. Our proposal for initial configuration includes these costs.

4. Vendor must provide technical support via telephone and/or email to the IDPH and system users during regular business hours

OZ Systems' Performance Support Services (PSS) is composed of clinical and technical support as well as training for our customers. We employ experienced clinical audiologists, technical support personnel, and former screeners and software users for these roles to provide our customers with a broad range of assistance. Iowa technical support customers will have a primary contact available to them who is specifically trained to deal with matters relating to the Iowa software configuration. Additional technical support team members will be available to answer inquiries as needed.

The OZ Systems' maintenance philosophy is that service needs to be accurate and readily available for our customers. Hence, we provide telephone support from 8 a.m. to 5 p.m. Central Standard Time, Monday through Friday. Technicians are on-call after hours in case of a system emergency.

Support may be provided via e-mail or telephone depending on the state's needs. OZ Systems is recommending that technical support for hospital, AEAs and diagnostic audiology staff be provided by email and that the state team have teleconference and telephone support.

5. Vendor must agree to a 6-year contract, in which time providing the most current version of the system free of charge

Based upon the state's acceptance of our proposal, OZ Systems will agree to a 6-year contract, during which time we will provide the state with the most current version of eSP at no additional charge.

6. Request that vendor provide customization free of charge for oneyear after the product is delivered. Based on the state's responses to questions submitted by vendors (Amendment Two, Question 16), OZ Systems is proposing to provide all necessary hours of programming time to ensure each specified system feature is working properly. There are no associated programming costs requested by OZ Systems, as the company believes it has a responsibility to fix system errors.

For customization of new functionality or enhancement to existing functionality beyond original specifications, OZ Systems will make available programming services from both junior and senior developers on a cost per hour basis. These fees will only be billed as accrued with IDPH and OZ Systems staff agreeing to development in writing following acceptance of the "use case."

7. TERMINATIONS, DAMAGES, OR CLAIMS

A. During the last five- (5) years, have you had a contract terminated for default? If so, you must submit full details including the other party's name, address, and contact information.

OZ SYSTEMS' RESPONSE: No.

B. During the last two (2) years, have you been assessed any penalties under any existing or past contracts with the State of lowa or other governmental entities? If so, indicate the reason for the penalty, the penalty amount of each incident, and the other party's name, address, and contact information.

OZ SYSTEMS' RESPONSE: No.

C. During the last two (2) years, have you, a subsidiary or intermediary company, parent company or holding company been the subject of any order, judgment or decree of any federal or state authority barring, suspending or otherwise limiting the right of the Contractor to engage in any business, practice or activity, or has trading in the stock of the companies has ever been suspended? If so, you must submit full details including the other party's name, address, and contact information.

OZ SYSTEMS' RESPONSE: No.

Company Information:

Optimization Zorn Corporation

2515 McKinney Avenue, Suite 850

Dallas, Texas 75201

Telephone: (214) 631-6161 Facsimile: (214) 631-4231

E-mail: Smontgomery@oz-systems.com

Officers:

Kenneth D. Pool, M.D.

President & CEO

2515 McKinney Avenue, Suite 850

Dallas, Texas 75201

Telephone: (214) 631-6161

E-mail: Kpool@oz-systems.com

Terese Finitzo, Ph.D.

Vice President

2515 McKinney Avenue, Suite 850

Dallas, Texas 75201

Telephone: (214) 631-6161

E-mail: Tfinitzo@oz-systems.com

OZ Systems is a privately held corporation.

D. TRAINING REQUIREMENTS

OZ Systems can meet the IDPH training requirements as stipulated in the RFP. We will provide on–site training during system implementation for the 10 requested individuals. Two days of on-site training is proposed which will be a combination of classroom training as well as hands on application training, including breakout sessions.

On Days 1 and 2, the basic components necessary for training screeners and program managers in hospitals will be reviewed. These include:

system login and security levels, screener and facility defaults for ease of use, the baby "journey" /protocols for IDPH, menus and tool bar review; how to add and edit patient records, necessary data items and system defaults for IDPH, how to use "To Do" lists, hearing screening data collection procedures, a review of screening outcomes, how to set appointments, how to print letters; how to complete the screening record, how to "transfer" responsibility to another hospital (Children's Hospital or NICU).

Day 2 will also cover additional items for program manager training for both state and hospital level personnel. These include managing user access, establishing (adding and editing) user permissions, search and filtering tools, generating statistical reports and formatting letters and other communications, import export tools, merging, and providers.

Day 3 is an online web-conferencing half-day of review and questions and answers, which we suggest take place approximately one week following site training.

Materials will be provided for approximately 10 individuals as stipulated in the RFP. The following materials will be made available on CD Rom to facilitate "a train the trainer approach": eSP site implementation, HIPAA review, equipment, training outlines and PowerPoint presentations, an eSP introduction plan, support information and contact names.

Unrestricted access to a training website will be made available to lowa during six months of state implementation to allow users to become familiar with the system without entering training data into the live eSP system. The training system and the live system will have on-line help for users.

Following on-site training, as an option, the state may request up to 4 two-hour, on-line (web conferencing) workshops in the first year on topics that the state staff identifies for additional training. As an option, the state may request additional days of on-site training as part of the IDPH Implementation team.

ATTACHMENT 1:

PROSPECTIVE VENDORS – SIGN AND SUBMIT CERTIFICATION WITH PROPOSAL.

PROPOSAL CERTIFICATION

I certify that I have the authority to bind the vendor indicated below to the specific terms, conditions and technical specifications required in the attached Request for Proposal BD80400S280 and offered in the vendor's proposal. I understand that by submitting this proposal, the vendor indicated below agrees to provide the services, which meet or exceed the requirements of the RFP unless noted in the proposal and at the prices quoted by the vendor.

I certify that the contents of the proposal are true and accurate and that the vendor has not knowingly made any false or misleading statements in the proposal.

Signature:	Date:	
Terese Finitzo, Vice President Printed Name and Title		
Optimization Zorn Corporation Name of Vendor Organization		

ATTACHMENT 2:

PROSPECTIVE VENDORS – SIGN AND SUBMIT CERTIFICATION WITH PROPOSAL.

CERTIFICATION OF INDEPENDENCE AND NO CONFLICT OF INTEREST

By submission of a proposal in response to RFP BD80400S280, the vendor certifies (and in the case of a joint proposal, each party thereto certifies) that the proposal has been developed independently, without consultation, communication or agreement with any employee or consultant of the Department who has worked on the development of this RFP, or with any person serving as a member of the evaluation committee; the proposal has been developed independently, without consultation, communication or agreement with any other vendors or parties for the purpose of restricting competition; unless otherwise required by law, the information in the proposal has not been knowingly disclosed by the vendor and will not knowingly be disclosed prior to the award of the contract, directly or indirectly, to any other vendor; no attempt has been made or will be made by the vendor to induce any other vendor to submit or not to submit a proposal for the purpose of restricting competition; no relationship exists or will exist during the contract period between the vendor and the Department that interferes with fair competition or is a conflict of interest.

Signature:	Date:	-
Terese Finitzo, Vice President Printed Name and Title		
Optimization Zorn Corporation Name of Vendor Organization		

ATTACHMENT 3:

PROSPECTIVE VENDORS – SIGN AND SUBMIT CERTIFICATION WITH PROPOSAL.

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION—LOWER TIER COVERED TRANSACTIONS

By signing and submitting this Proposal in response to RFPBD80400S280, the vendor is providing the certification set out below:

- 1. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the vendor knowingly rendered an erroneous certification, in addition to other remedies available to the federal government the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- 2. The vendor shall provide immediate written notice to the person to which this Proposal is submitted if at any time the vendor learns that its certification was erroneous when submitted or had become erroneous by reason of changed circumstances.
- 3. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principle, proposal, and voluntarily excluded, as used in this clause, have the meaning set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this Proposal is submitted for assistance in obtaining a copy of those regulations.
- 4. The vendor agrees by submitting this Proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- 5. The vendor further agrees by submitting this Proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions

PAGE 1 of 2

- 6. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from covered transactions, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. A participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Non-procurement Programs.
- 7. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 8. Except for transactions authorized under paragraph 4 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
 - (1) The vendor certifies, by submission of this Proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.
 - (2) Where the vendor is unable to certify to any of the statements in this certification, such vendor shall attach an explanation to this Proposal.

Signature:	Date:	
Terese Finitzo, Vice President		
Printed Name and Title		
Optimization Zorn Corporation		
Name of Vendor Organization		

Page 2 of 2

ATTACHMENT 4:

PROSPECTIVE VENDORS – SIGN AND SUBMIT CERTIFICATION WITH PROPOSAL.

Optimization Zorn Corporation nereby authorizes any person or entity, public oconcerning the vendor's background, including but n	
regarding its prior rendering of services similar to the o release such information to the Department.	ose detailed in RFP BD80400S28
The vendor acknowledges that it may not agree with by such person or entity in response to a reference hat the information and opinions given by such perspective contract awards from the Department or moperations.	request. The vendor acknowledge son or entity may hurt its chances to
The vendor is willing to take that risk. The vendor a he Department, and the State of Iowa from any liabil n releasing this information or using this information	lity whatsoever that may be incurred
Optimization Zorn Corporation	
Printed Name of Vendor Organization	

Attachment 5:

PROSPECTIVE VENDORS – SIGN AND SUBMIT CERTIFICATION WITH PROPOSAL.

I <u>Terese Finitzo</u>	(Print Name)
For Optimization Zorn Corporation	(Vendor)
acknowledge that in the performance of responsibilities un may acquire or have access information regarding State and/or Iowa citizens and that such information is design confidential".	of Iowa employees, clients
I acknowledge that my company may be subject to significant and civil penalties if it misuses or improperly releases information it may acquire or have access to.	
Therefore, my company agrees not to disclose or misuse purposes of performing under the contract. If there is doubt regard it as confidential information. We further agree procedures and policies with respect to the handling of confidential	over confidentiality, we will to adhere to any written
I understand, acknowledge, and agree that this confide agreement remains in full force and effect after the conclusion of the contract.	
Date	:
(Signature)	

Attachment A

Initial Implementation Plan For Iowa

Week 1

Upon receipt of contract, OZ Systems, within 2 working days, will provide documents for the state to review, modify, and approve. These will include:

1) Facility Implementation Plan. This is an overview of the technology specifications to use eSP at the site/facility level. It includes a checklist for your hospitals so that IDPH and OZ Systems can verify preparedness.

This plan also includes a configuration questionnaire for lowa-specific configuration changes to be made by OZ Systems for the state version of eSP. This includes insertion of the lowa state program logo (EHDI or IDPH); and default values for screeners and program managers at the facilities versus the IDPH. (For example, are all data at the IDPH level disclosed to state personnel or does it have specific rules to implement?).

The state will be requested to select an Iowa-application URL (for example: www.tehdi.com for Texas EHDI).

Following the completion and return of these items from IDPH, OZ Systems will complete the essential configuration changes necessary to "go live" within the state's timeframe.

- 2) System Introduction. This is a PowerPoint introduction to eSP that Iowa may disseminate to its facilities. This document provides an introductory overview of eSP. It may include a "go-live" date for each facility and information on how to transition from the current data management system to the state's new eSP system, when appropriate. IDPH will review this document, suggest state specific modifications, which OZ Systems will make within one working day of receiving the modification request.
- 3) *Training Documents*. These documents include a preliminary training plan for IDPH review prior to the "Train-the-Trainers" meetings, an introductory informational PowerPoint presentation for IDPH personnel to become familiar with the eSP system.
- 4) Once these documents and plans are approved by the state, OZ Systems will provide them on CD ROM for dissemination to facilities should the state request it along with a Help Guide.

Week 2

During week two, three activities will take place.

 OZ Systems will conduct on-site "Train the Trainers" sessions for selected IDPH personnel as requested. The initial training will last 2 days (anticipated to be on December 8 and December 9, 2003, if the original timeframe is maintained.)

This on-site training will include both traditional classroom instruction and compelling online training with an actual eSP application using the OZ Systems Web Conferencing Training Center. Such a training site will mirror the real lowa site, but will only contain "practice" data. In this way, the live site will not need to have "demonstration" or "practice" data.

The OZ Systems Web Training Center permits secure and interactive sessions. Users will be assigned user names and passwords. For maximal trainee involvement, computers with Internet access should be available for each trainee.

- Access to the eSP online training web site, www.oz-systems.com/training, will be provided to state selected IDPH personnel in Week 2 following training. This site, which will be used during the onsite training, is then provided to the state so that additional state users-in-training can access the site for self-paced "practice" sessions.
- 3. In week two, the state may elect to begin the DSDM (Dynamic System Development Methodology) process to identify customization to the Iowa EHDI System. This will include one session with OZ Systems development and support staff to begin the dialogue on what the Iowa EHDI system needs to accomplish long term.

Week 3

Following the two days of on-site training and the one-week of training- site access in week two, week three will begin with a ½ day session via teleconference conducted in order to address users' questions.

IDPH will conduct first round training for the 3 perinatal sites during this week. OZ Systems training staff will be available to assist in this first training using the Web Conferencing Center. These initial sites will be given access to the training web site over a 2-week period prior to "going live". OZ Systems support staff will be available by telephone to answer questions in this time period for these initial users. Iowa has the option to request that OZ Systems' staff be present at these initial sessions.

OZ Systems will conduct conference calls with state personnel to resolve issues, monitor status, provide counsel during the initial four (1 state, 3 facilities) site trainings on a schedule requested by the state.

Week 4

OZ Systems will configure the three perinatal sites with state staff in preparation for "go-live" date. This includes assigning permissions, etc.

January 2, 2004

The three preliminary sites "go live" if the original time frame has been maintained. OZ Systems' staff available by telephone and email for support.

From the initial "go live" date through the subsequent two weeks, OZ Systems' assigned staff and IDPH staff will conduct an evaluation and review of the process.

January 14-31, 2004 – Review/modify/correct

<u>Post February 1, 2004</u> - Statewide rollout to occur at state's pace. OZ Systems has the experience to implement simultaneously in multiple sites.

Attachment B

Maria Cantu

2515 McKinney Avenue Suite 850 Dallas, Texas 75201 (214) 237-7046 Mcantu@oz-systems.com

Professional Experience

Optimization Zorn Corporation (OZ Systems)

Dallas, Texas

August 2000 to Present

Customer Support Director

Responsibilities include working closely with state departments of health and international governmental agencies to ensure implementation and training of statewide and national hearing screening programs are carried out according to contract standards. Design training materials for OZ Systems information management systems, including SIMS© and eSP (eScreener Plus) applications. Provide training and implementation management for programs in Texas, Delaware, California, Iowa, and the United Kingdom. Coordinate product modifications and feedback from customers with Customer Support staff, Software Development staff, and Sales staff to ensure all customer needs are addressed. Assist customers and sales representatives with escalated technical issues that cannot be resolved at the help desk level. Supervise Customer Support staff and software production to new customers. Assist manufacturers in creating new product links to OZ Systems software products.

May 1998 to August 2000

Customer Support Manager

Assisted 250 hospitals nationwide with technical issues, including; software installation, customization, and system maintenance. Trained hospital staff and sales representatives to utilize OZ Systems' SIMS© software. Other responsibilities included software production and new product beta testing.

SOUNDS OF TEXAS PROJECT FOR UNIVERSAL INFANT HEARING DETECTION

Dallas, Texas

November 1996 to May 1998

Technical Trainer & Site Manager

Responsibilities included implementation of the Universal Infant Hearing screening pilot program in hospitals throughout the State of Texas. Educated nursing staff and designated hearing screeners regarding the importance of infant hearing screening and early identification of hearing loss. Developed site-specific daily and follow-up protocols. Trained designated infant hearing screeners to use otoacoustic emissions and screening auditory brainstem response technologies in combination with OZ Systems' SIMS© software. Responsibilities also included monitoring 7 hospitals and providing program quality assurance measures, as well as providing technical assistance to all hospitals participating in the Sounds of Texas project.

METHODIST MEDICAL CENTER OF DALLAS/ NEURO SCIENCE DEPARTMENT

Dallas, Texas

March 1992 to July 1997

Hearing Screening Program Coordinator

Responsibilities included performing the birth admission hearing screens on all infants (wellborn and NICU) at the facility. Administered case management for infant's records referred for further testing and scheduling of follow-up appointments and performed the follow-up hearing screen. Hearing screening of infants was performed using TEOAE and SABR. Collected auditory brainstem response evaluation data on infants (interpretation of data provided by staff audiologist). Prepared neurology patients for electroencephalograms. Additional responsibilities included general administrative duties.

Presentations

United Kingdom – Nottingham, England – Presentation and overview of E-screener Plus software for NHS committee, September 2002

Scotland National Healthcare Services – Ayr, Scotland – Presentation and overview of E-screener Plus software for NHS committee, October 2002

United Kingdom – Nottingham, England – Users group and how to workshop for newborn nursery screeners and program managers involved in National Health Services Pilot Project – July 2002

State of Texas Legislature, State Capital, Austin, Texas – Overview of SIMS© for Texas Department of Health and Legislative staff – August 2000

University of Iowa Hospital and School, Iowa City- Training via ICN to facilities involved in state wide hearing screening efforts, May 2000

American Speech and Hearing Association, National Outcomes and Measurement Study, Rockville, Maryland - Assisted in training, and question and answer session, February 2000

University of Florida, University of Miami and Children's Ear and Hearing- Nemours, Jacksonville – State of Florida training and implementation of the OZ SIMS© software. Florida, October 1998.

Christiana Health Systems – Training and implementation of the OZ SIMS© software. Delaware, September 1998.

Med-Acoustics, Inc. & Tele-acoustics – Sales Representative training and implementation of the OZ SIMS© software. Georgia, May 1998.

Northeastern Technologies, Instrumentation Associates, & Bioacoustics, Inc – Sales Representative training and implementation of the OZ SIMS© software. Pennsylvania, April 1998

Trainer for Utah State University utilizing ILO88 and HITRACK, Baton Rouge, LA: Aug 1995

Education

Mountain View College
Dallas, Texas
Associate Degree in Science
May 1995

Brenée E. Hill

101 N. Brookside Drive Dallas, Texas 75214 214-824-2794

Experience

August 2001 - present

Clinical Liaison/Customer Support

OZ Systems, Inc., Dallas, Texas

- Provide clinical expertise, guidance, and ongoing support at the state and individual facility levels in the implementation and maintenance of early hearing detection and intervention programs
- Assist customers in OZ SIMS and eSP application use, problem identification and resolution
- System Testing of eSP web application
- Conduct in-house and on-site customer training
- Create marketing pamphlets to distribute to existing and potential customers
- Participate in tradeshows to inform and educate potential and existing customers
- Perform quality assurance checks on software
- Supervise cooperative education students

June 1999 - July 2001

Audiologist

UT Southwestern Medical Center/Children's Medical Center, Dallas, Texas

- Performed behavioral, electrophysiological, and balance function testing for a diverse age group
- Coordinated progressive hearing loss program
- Assisted in obtaining hearing aid funding for children in need

EDUCATION

May 1999

Master of Science in Communication Disorders

Texas Tech University Health Sciences Center Lubbock. Texas

May 1997

Bachelor of Arts in Speech & Hearing Sciences

University of North Texas Denton, Texas